Exhibit F

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 2 of 13 PageID #: 146

U.S. Patent No. 10,339,520

Claim No.	Claim Language	Samsung Pay-enabled computing device
1 [Preamble]	An electronic	A Samsung Pay-enabled computing device is an electronic device.
	device comprising	Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022). See also Lexy Savvides, Samsung Pay: Everything you need to know (FAQ), CNET (July 21, 2021 3:00 a.m. PT),
1a	a near-field communication (NFC) unit;	https://www.cnet.com/how-to/samsung-pay-everything-you-need-to-know-faq-mobile-wallet/. A Samsung Pay-enabled computing device includes a near-field communication (NFC) unit. A Samsung Pay-enabled computing device includes a near-field communication (NFC) unit. Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022).

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 3 of 13 PageID #: 147

Claim No.	Claim Language	Samsung Pay-enabled computing device
		Make a payment using the app
		With Samsung Pay, you can purchase things without digging through your wallet. When you're ready to pay, open Samsung Pay on your phone. Tap Pay, and select your preferred card. Tap PIN or IRIS, and then enter the required security information. Or if you have fingerprint security set up, simply place your finger on your phone's fingerprint scanner.
		Next, hold the back of the phone up to the contactless reader and perform your desired actions to complete your purchase. Make an in-store payment with Samsung Pay, Samsung, https://www.samsung.com/us/support/answer/ANS00045102/ (last visited Apr. 20, 2022); see also Tech With Brett, How to Setup and Use Samsung Pay, YouTube (Oct. 1, 2018), https://youtu.be/zR3xz6GYIzc?t=389; Jessica Dolcourt, How Samsung Pay works (pictures), CNET (Mar. 3, 2015 8:57 a.m. PT), https://www.cnet.com/pictures/how-samsung-pay-works-pictures/2/.
1b	a touch sensor array;	A Samsung Pay-enabled computing device includes a touch sensor array. Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022). See also What to do when the touchscreen of Galaxy Device responds slowly or improperly?, Samsung (Sept. 22, 2020), https://www.samsung.com/ph/support/mobile-devices/what-to-do-when-the-touchscreen-of-galaxy-device-responds-slowly-or-improperly/.

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 4 of 13 PageID #: 148

Claim No.	Claim Language	Samsung Pay-enabled computing device
1c	a display;	A Samsung Pay-enabled computing device includes a display.
		EASIEND POY EASIEND POY Const Services For Const For Const For Const Services For Const For
		Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022). See also Adjust your Galaxy phone's display settings, Samsung, https://www.samsung.com/us/support/answer/ANS00079034/ (last visited Apr. 20, 2022).
1d	a motion rate	A Samsung Pay-enabled computing device includes a motion rate detection array.
	detection array;	ACC Raw Data - x: -504, y: 2368, z: 3395 x-angle: -6, y-angle: 34, z-angle: 55
		PROXIMITY: 0.0 ADC: 94(76,94,112) TSP color ID: 1 Offset: 7 1st High/Low THD: 2100 / 900 2nd High/Low THD: 16368 / 1000
		Device ID : TMD4906 Barometer Sensor
		BAROMETER: 1040.12 hPa
		ALTITUDE: -221.38 m
		Lights Sensor Light Sensor: 42 lux Light Sensor: 55,80,65,83,49,7 (R,G,B,W)
		GYROSCOPE: Y: -1.13, P: 6.05, R: 1.16 GYROSE/FEST DISPLAY OIS GYRO: X: -1.267 Y: -1.213
		See Amboy Manalo, This Samsung Galaxy Dialer Code Lets You Test Each Sensor on Your Phone, Gadget Hacks, Gadget Hacks (Mar. 5, 2018 2:09 PM), https://android.gadgethacks.com/how-to/samsung-galaxy-dialer-code-lets-you-test-each-sensor-your-phone-0183239/.

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 5 of 13 PageID #: 149

Claim No.	Claim Language	Samsung Pay-enabled computing device
1e	a memory for	A Samsung Pay-enabled computing device includes a memory that stores a user data and a currency amount.
	storing a user data	Edit your profile
	and a currency	In order to use Samsung Pay, you'll need to enter certain information in your profile, such as your name and address.
	amount;	 To edit your profile, navigate to and open Samsung Pay, and then tap Menu (the three horizontal lines).
		2. Tap Settings , and then swipe to and tap Profile .
		3. You can edit your full name, phone number, and email address by tapping the desired field. You can also view your Samsung account ID, Samsung Pay registration date, and Device info from this page.
		John Adams
		1234-567-8900 C Profile
		Trial Albrea
		johnbrianadams1@gmail.com Full name
		Address Register new address +
		Email address
		Sampung account ID 4. Tap Register new address to add a new address. Up to three addresses can be saved.
		5. To set a particular address as your default, tap Edit (the pencil icon) next to your desired address, and then swipe to and select Default address .
		6. Once you're done editing the address, tap Save to apply your changes.
		Edit your profile information in Samsung Pay, Samsung,
		https://www.samsung.com/us/support/answer/ANS00078427/ (last visited Apr. 20, 2022).
		■ Money
		1245 ⊕ 48 = molley ≡ SAMSUNG ₹ Q
		SAMESUND Pay Cancel Account details More - Samesung Pay Card Samesung Pay Card Samesung Payor to Maffel
		Colling information 75W Planning LO Claim Johns Coll Transfer Application Transfer
		Oxivery Information 661 73W Plumeria Dt San Jones Total Indiance 80,000.00
		Total \$190 > Interest this month \$0.29 Interest othe 0.2% APY
		×
		Pay with fregopoints Use ENI Let us where you get it and well wrom no transactions.
		1 got my card
		×
		Horne Per Mozer
		ш о с
		Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022). Introducing
		Samsung Money by SoFi: Do More With Your Money, Samsung. https://news.samsung.com/us/introducing-
		samsung-money-samsung-pay-sofi/ (last visited Apr. 20, 2022).

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 6 of 13 PageID #: 150

Claim No.	Claim Language	Samsung Pay-enabled computing device
1f	a processor	A Samsung Pay-enabled computing device includes a processor operatively coupled to the NFC unit, the touch
	operatively	sensor array, the display, the motion rate detection array, and the memory.
	coupled to the NFC unit, the touch sensor array, the display, the motion rate detection array, and the memory;	SAMSURE POY SERVING TO Concut Serving Marianta Serving Marianta
4		Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022).
1g	a computer readable medium having instructions stored thereon that, responsive to execution by the electronic device, cause the electronic device to perform operations comprising:	A Samsung Pay-enabled computing device includes a computer readable medium having instructions stored thereon that, responsive to execution by the electronic device, cause the device to perform operations. Samsung Pay, Samsung, https://www.samsung.com/us/samsung-pay/ (last visited Apr. 20, 2022).

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 7 of 13 PageID #: 151

Claim No.	Claim Language	Samsung Pay-enabled computing device
1h	accepting a user	A Samsung Pay-enabled computing device accepts a user input of issued payments information input at a touch
	input of issued	screen display.
	payments	
	information input	Add a payment card
	at a touch screen	Camering has you covered, because Camering Day has partnered with ten LLC, hanks and credit card companies. Like American
	display of the	Samsung has you covered, because Samsung Pay has partnered with top U.S. banks and credit card companies, like American Express, Visa, and MasterCard. Plus, we're always expanding our list of financial partners.
	electronic device,	
		 Navigate to and open Samsung Pay on your phone. Tap Menu (the three horizontal lines) in the top left
		corner, and then tap Cards.
		3. Next, tap Add card; it looks like a credit card with a plus sign next to it. Next, tap Add credit/debit card. Cards
		4. Follow the instructions to register your card. When you add a card, you must agree to the card's terms and conditions.
		5. If you have any questions about the terms, contact the card issuer.
		Add credit or debit cards to Samsung Pay, Samsung,
		https://www.samsung.com/us/support/answer/ANS00045170/ (last visited Apr. 21, 2022).
		How do I add my Chase cards to Samsung Pay?
		Choose the Samsung Pay icon, and log in using your Samsung account information.
		2. If you do not already have a Samsung account, you can create one.
		3. Once logged in you can, touch ADD CARD in Samsung Pay app to begin the process of adding your card.
		 Center the card in the on-screen window and Samsung Pay will read the card number. Or you can enter the card number manually.
		5. Verify or enter the additional information such has Cardholder Name, Expiration Date and Security Code (CVV).
		6. Accept the Terms and Conditions for adding a card to a digital wallet by touching AGREE TO ALL.
		 You may be prompted to select a delivery method for receiving a One Time Passcode, such as SMS or EMAIL or CALL IN.
		The One Time Passcode will be delivered to the destination selected. Enter the code received and touch SUBMIT.
		Once complete, your card is ready for use in Samsung Pay.
		How to use Samsung Pay, Chase, https://www.chase.com/digital/digital-payments/samsung-pay/faqs/how-to-use
		(last visited Apr. 20, 2022).

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 8 of 13 PageID #: 152

Claim No.	Claim Language	Samsung Pay-enabled computing device
1i	wherein the	A Samsung Pay-enabled computing device accepts user input of issued payments information input, wherein the
	information	information comprises an issuer provided payment information.
	comprising an issuer provided	How do I add my Chase cards to Samsung Pay?
	payment information;	Choose the Samsung Pay icon, and log in using your Samsung account information.
	information,	2. If you do not already have a Samsung account, you can create one.
		3. Once logged in you can, touch ADD CARD in Samsung Pay app to begin the process of adding your card.
		 Center the card in the on-screen window and Samsung Pay will read the card number. Or you can enter the card number manually.
		5. Verify or enter the additional information such has Cardholder Name, Expiration Date and Security Code (CVV).
		6. Accept the Terms and Conditions for adding a card to a digital wallet by touching AGREE TO ALL.
		 You may be prompted to select a delivery method for receiving a One Time Passcode, such as SMS or EMAIL or CALL IN.
		8. The One Time Passcode will be delivered to the destination selected. Enter the code received and touch SUBMIT.
		Once complete, your card is ready for use in Samsung Pay.
		How to use Samsung Pay, Chase, https://www.chase.com/digital/digital-payments/samsung-pay/faqs/how-to-use (last visited Apr. 20, 2022).
1j	wherein the	The memory of the Samsung Pay-enabled computing device includes device specific and user-specific
13	memory	information.
	comprises device-	Edit your profile
	specific and user-	In order to use Samsung Pay, you'll need to enter certain information in your profile, such as your name and address.
	specific	To edit your profile, navigate to and open Samsung Pay, and then tap Menu (the three horizontal lines).
	information; and,	Tap Settings, and then swipe to and tap Profile. 3. You can edit your full name, phone number, and email address by tapping the desired field. You can also view your Samsung account ID, Samsung Pay registration date, and Device info from this page.
		12:34-567-8900 CP-04 Alleron
		johnbrianadams1@gmail.com Full name
		Address Register new address + Phone number
		Samung account ID
		4. Tap Register new address to add a new address. Up to three addresses can be saved. 5. To set a particular address as your default, tap Edit (the pencil icon) next to your desired address, and then swipe to and
		select Default address . 6. Once you're done editing the address, tap Save to apply your changes.
		Edit your profile information in Samsung Pay, Samsung,
		https://www.samsung.com/us/support/answer/ANS00078427/ (last visited Apr. 20, 2022).

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 9 of 13 PageID #: 153

Claim No.	Claim Language	Samsung Pay-enabled computing device
		Galaxy S10
		Phone number 000-000-0000 Model number SM-G973U Serial number R38KC090E7A IMEI 3519 2410 0188 669 Hardware version REV1.0
		Finding your phone and tablet's IMEI, model number, or serial number, Samsung, https://www.samsung.com/us/support/answer/ANS00048604/; (last visited Apr. 20, 2022).
1k	wherein the user provided payment information is communicated wirelessly; and,	The Samsung Pay-enabled computing device communicates wirelessly the user provided payment information. 2. What is a token and how is it generated? A digital token is created to represent consumers' payment credentials. By substituting the real card number with a token, Samsung Pay avoids putting the real card numbers at risk of theft and misuse. Like credit and debit card numbers, the purpose of the digital token is to route transactions to the correct payment network and issuer. Samsung Pay does not store credit or debit card numbers. Instead, Samsung Pay uses tokens for transactions. Tokens are generated by the payment network, and not by the Samsung Pay handset. The card issuers and payment networks set the rules and parameters of the tokenization service, conduct account verification and cardholder authorization during the token request stage (when the token is provisioned), and authorize transactions.
		FAQs, Samsung (Aug. 7, 2016) available at https://security.samsungmobile.com/doc/Press_Guidance_Samsung_Pay.pdf.
		3.1 In-Store EMV Contactless Payments with Device-Centric Digital Wallets
		Apple, Google, and Samsung were among the first to implement EMV payment tokens in digital wallets that hold credentials for several payments use cases. These device-centric digital wallets play the role of a token requestor; they may capture the cardholder's PAN and request that it be replaced with a payment token from a TSP. Tokenization of payment credentials in digital wallets enables issuers to establish a secure presence on a wallet. US Payments Forum, EMV Payment
		Tokenization Primer and Lessons Learned at 12 (June 2019) available at https://www.uspaymentsforum.org/wp-content/uploads/2019/06/EMV-Payment-Tokenization-Primer-Lessons-Learned-FINAL-June-2019.pdf.

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 10 of 13 PageID #: 154

Claim No.	Claim Language	Samsung Pay-enabled computing device
		CARDHOLDER TOKEN REQUESTOR (TR) MOBILE DEVICE PROVIDER (TSP) ISSUER TOKEN SERVICE PROVIDER (TSP) ISSUER MOBILE APPS
11	wirelessly	Mobile payments with digital wallets and tokenization: How Google Pay, Apple Pay and Samsung Pay protect your card details, Advantio (Feb. 22, 2021), https://www.advantio.com/blog/mobile-payments-with-digital-wallets-and-tokenization-how-google-pay-apple-pay-and-samsung-pay-protect-your-card-details; See also EMVCo, EMV® Payment Tokenisation Specification – Technical Framework v2.1 at 35–36 (Jun. 14, 2019) available at https://www.emvco.com/emv-technologies/payment-tokenisation/.
11	wirelessly receiving a static device account number payment information for storage on the electronic device; and	The Samsung Pay-enabled computing device wirelessly receives a static device account number payment information for storage on the electronic device. 2. What is a token and how is it generated? A digital token is created to represent consumers' payment credentials. By substituting the real card number with a token, Samsung Pay avoids putting the real card numbers at risk of theft and misuse. Like credit and debit card numbers, the purpose of the digital token is to route transactions to the correct payment network and issuer. Samsung Pay does not store credit or debit card numbers. Instead, Samsung Pay uses tokens for transactions. Tokens are generated by the payment network, and not by the Samsung Pay handset. The card issuers and payment networks set the rules and parameters of the tokenization service, conduct account verification and cardholder authorization during the token request stage (when the token is provisioned), and authorize transactions.
		FAQs, Samsung (Aug. 7, 2016) available at https://security.samsungmobile.com/doc/Press_Guidance_Samsung_Pay.pdf. 3.1 In-Store EMV Contactless Payments with Device-Centric Digital Wallets
		Apple, Google, and Samsung were among the first to implement EMV payment tokens in digital wallets that hold credentials for several payments use cases. These device-centric digital wallets play the role of a token requestor; they may capture the cardholder's PAN and request that it be replaced with a payment token from a TSP. Tokenization of payment credentials in digital wallets enables issuers to establish a secure presence on a wallet.

Claim No.	Claim Language	Samsung Pay-enabled computing device
		US Payments Forum, EMV Payment Tokenization Primer and Lessons Learned at 12 (June 2019) available at
		https://www.uspaymentsforum.org/wp-content/uploads/2019/06/EMV-Payment-Tokenization-Primer-Lessons-
		Learned-FINAL-June-2019.pdf.
		CARDHOLDER TOKEN REQUESTOR (TR) PROVIDER (TSP) ISSUER MOBILE DEVICE PROVIDER TOKEN SERVICE PROVIDER (TSP) ISSUER TOKEN SERVICE PROVIDER (TSP) ISSUER
		Mobile payments with digital wallets and tokenization: How Google Pay, Apple Pay and Samsung Pay protect your card details, Advantio (Feb. 22, 2021), https://www.advantio.com/blog/mobile-payments-with-digital-wallets-and-tokenization-how-google-pay-apple-pay-and-samsung-pay-protect-your-card-details; See also EMVCo, EMV® Payment Tokenisation Specification – Technical Framework v2.1 at 35–36 (Jun. 14, 2019) available at https://www.emvco.com/emv-technologies/payment-tokenisation/.
1 m	wherein at least a portion of the payment information is a limited-use number for limited-use by the	The Samsung Pay-enabled computing device includes a payment information, at least a portion of which is a limited-use number for limited use by the device, in place of an issuer provided payment information. 2. What is a token and how is it generated? A digital token is created to represent consumers' payment credentials. By substituting the real card number with a token, Samsung Pay avoids putting the real card numbers at risk of theft and misuse. Like credit and debit card numbers, the purpose of the digital token is to route transactions to the correct payment network and issuer. Samsung Pay does not store credit or
	device, in place of a issuer provided payment information; and,	debit card numbers. Instead, Samsung Pay uses tokens for transactions. Tokens are generated by the payment network, and not by the Samsung Pay handset. The card issuers and payment networks set the rules and parameters of the tokenization service, conduct account verification and cardholder authorization during the token request stage (when the token is provisioned), and authorize transactions. FAQs, Samsung (Aug. 7, 2016) available at https://security.samsungmobile.com/doc/Press_Guidance_Samsung_Pay.pdf.
1n	dynamically- generating a one- time limited-use numbers based on	The Samsung Pay-enabled computing device dynamically generates a one-time limited use number for each transaction based at least one of a set of information including: user-identifying information; user secrets; device information; device secrets; time; merchant; facility location; sequence count; payment information; account information; amount; and transaction information.

Case 2:22-cv-00141-JRG-RSP Document 1-6 Filed 05/11/22 Page 12 of 13 PageID #: 156

Claim No.	Claim Language	Samsung Pay-enabled computing device
	at least one of a set of information including: user-identifying information; user secrets; device information; device secrets; time; merchant; facility location; sequence count; payment information; account information; amount; and transaction information; and	3. How is a cryptogram generated? A cryptogram is generated using at least three pieces of information: the digital token, the application transaction counter (ATC), and a secret key. The cryptogram is designed to appear fully random to anyone that does not have the secret key. This works to prevent a cryptogram from being guessed. The secret key is generated by the payment networks and is protected, end to end, between the payment networks and TrustZone on the device. Only one cryptogram can be generated per explicit user authorization. The cryptograms are used to tie an ATC to a digital token and help to prevent modification of the ATC. This in turn helps to prevent transaction information used for one purchase from being reused for multiple purchases. FAQs, Samsung (Aug. 7, 2016) available at https://security.samsungmobile.com/doc/Press_Guidance_Samsung_Pay.pdf. See also Mobile payments with digital wallets and tokenization: How Google Pay, Apple Pay and Samsung Pay protect your card details, Advantio (Feb. 22, 2021), https://www.advantio.com/blog/mobile-payments-with-digital-wallets-and-tokenization-how-google-pay-apple-pay-and-samsung-pay-protect-your-card-details; US Payments Forum, EMV Payment Tokenization Primer and Lessons Learned at 12 (June 2019) available at https://www.uspaymentsforum.org/wp-content/uploads/2019/06/EMV-Payment-Tokenization-Primer-Lessons-Learned-FINAL-June-2019.pdf; EMVCo, EMV® Payment Tokenisation Specification — Technical Framework v2.1 at 35–36 (Jun. 14, 2019) available at https://www.emvco.com/emv-technologies/payment-tokenisation/.
10	using said static device account number and said dynamically generated one-time limited-use number together in the place of issuer provided payment information for making a payment transaction.	The Samsung Pay-enabled computing device uses the static device account number and the dynamically generated one-time limited-use number together in place of issuer provided payment information for making a payment transaction.

Claim No.	Claim Language	Samsung Pay-enabled computing device
		 How does Samsung Pay work? Each time Samsung Pay is used for a transaction, the Samsung Pay handset sends at least three pieces of information.
		The first is a digital token that represents the credit or debit card information. The digital token is a surrogate credit or debit card number. The digital token's primary purpose is to route transactions to the correct payment network and to the correct issuer.
		The second piece of information is the application transaction counter (ATC). The ATC is a counter that is updated for every transaction. Its purpose is to help ensure that the same transaction information cannot be replayed to make multiple purchases. Payment networks use this number to track the sequence of transactions and determine whether an attempted transaction is older than the last one approved or is otherwise out of sequence. If so, it is an indication that something is amiss, and appropriate action can be taken.
		The third piece of information is the cryptogram. The cryptogram is an authentication code generated using, at a minimum, a secret key, the digital token and the ATC. Cryptograms serve to validate that the transaction information has not been modified and that it was generated by the expected user's handset. FAQs, Samsung (Aug. 7, 2016)
		available at https://security.samsungmobile.com/doc/Press_Guidance_Samsung_Pay.pdf. See also Mobile
		payments with digital wallets and tokenization: How Google Pay, Apple Pay and Samsung Pay protect your
		card details, Advantio (Feb. 22, 2021), https://www.advantio.com/blog/mobile-payments-with-digital-wallets-
		and-tokenization-how-google-pay-apple-pay-and-samsung-pay-protect-your-card-details; US Payments Forum,
		EMV Payment Tokenization Primer and Lessons Learned at 12 (June 2019) available at https://www.uspaymentsforum.org/wp-content/uploads/2019/06/EMV-Payment-Tokenization-Primer-Lessons-
		Learned-FINAL-June-2019.pdf; EMVCo, EMV® Payment Tokenisation Specification – Technical Framework
		v2.1 at 35–36 (Jun. 14, 2019) available at https://www.emvco.com/emv-technologies/payment-tokenisation/.